ABSTRACT OF THE DISCLOSURE

A stabilizing DC current interface for an electro-deionization (EDI) water purifying module. Each EDI module comprises anionic/cationic membranes, a center pipe, nets/spacers in concentrate/dilute water chambers and an anode and cathode for coupling to the stabilizing DC current interface. Because a stabilized DC current is provided by the interface, the power to each EDI module is not influenced by water temperature, flow rate, water quality in the module, thereby providing a stabilized quality product water while saving energy. A plurality of EDI modules can be operated in electrical series using a DC current interface resulting in reduced DC power consumption.